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60/345,917 31 December 2001 (31.12.2001) US(71) Applicant (for all designated States except US): **THE JOHNS HOPKINS UNIVERSITY SCHOOL OF MEDICINE** [US/US]; 720 Rutland Avenue, Baltimore, MD 21205 (US).

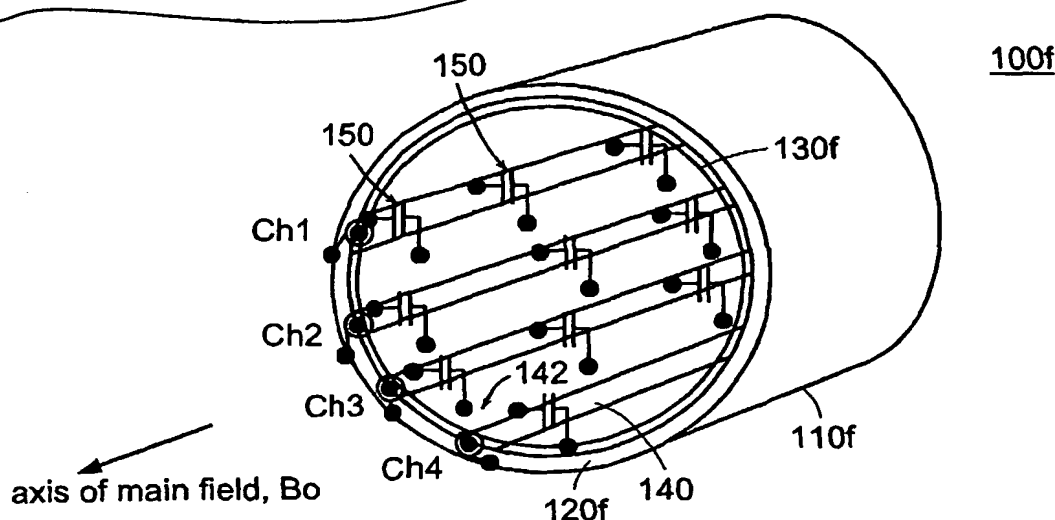
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(75) Inventor/Applicant (for US only): **BOTTOMLEY, Paul, A.** [US/US]; 6308 Velvet Path, Columbia, MD 21044 (US).(74) Agent: **DALEY, William, J., Jr.**; Edwards & Angell, LLP, P.O. Box 9169, Boston, MA 02209 (US).(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW.(84) Designated States (*regional*): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

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(54) Title: **MRI TUNABLE ANTENNA AND SYSTEM**

(57) Abstract: A strip array antenna including a number of conductors (14) that are connected to ground or virtual ground through at least one reactive component (150). The apparent electrical length of conductors (140) is tuned so that it equals an integer multiple of a quarter wavelength at the operating frequency.

WO 03/058283 A1